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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/541,094

06/29/2005

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EXAMINER

GREECE, JAMES R

ART UNIT

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2873

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/541,094	<b>Applicant(s)</b> KURODA ET AL.	
	<b>Examiner</b> JAMES R. GREECE	<b>Art Unit</b> 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-20 is/are allowed.
- 6) ☒ Claim(s) 1 and 21 is/are rejected.
- 7) ☒ Claim(s) 2-8 and 22-28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono et al (USPAT 5,267,082).

Re claim 1, Ono et al teaches for example in fig. 1, A zoom lens of an inner focus type having four or five lens groups (for details see at least abstract lines 1-4), including at least a first lens group having positive refractive power (for details see at least group 1), a second lens group having negative refractive power (for details see at least group 2), which is movable in an optical axis direction mainly for zooming varying power (for details see at least abstract lines 1-4) , a third lens group having positive refractive power (for details see at least group 3), and a fourth lens group having positive or negative refractive power (for details see at least group 4), which is movable in the optical axis direction for correcting fluctuations in focal position during zooming

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and for focusing (for details see at least abstract lines 1-4), which lens groups are arrayed in order from an object side, characterized in that: said first lens group comprises at least a concave lens, a convex lens, and a triple-cemented lens in which a lens is sandwiched in the middle, which lenses are arrayed in order from the object side (for details see at least abstract lines 4-7 and group 1, lenses 3-5).

But, Ono et al fails to explicitly teach special low dispersion glass for the sandwiched lens.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Ono et al to include the limitation special low dispersion glass, since it is within the ordinary skill of a worker in the art to select a known formulation of a disclosed material on the basis of its suitability for the intended use.

Re claim 21, Ono et al teaches for example in fig. 1, An imaging apparatus having a zoom lens, imaging means for transforming an image taken in by said zoom lens to an electrical image signal, and image control means (for details see at least col. 1, lines 9-21), characterized in that: said zoom lens of an inner focus type having four or five lens groups (for details see at least abstract lines 1-4), comprises at least a first lens group having positive refractive power (for details see at least group 1), a second lens group having negative refractive power (for details see at least group 2), which is movable in an optical axis direction mainly for zooming (varying power) (for details see at least abstract lines 1-4), a third lens group having positive refractive

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power (for details see at least group 3), and a fourth lens group having positive or negative refractive power (for details see at least group 4),

which is movable in the optical axis direction for correcting fluctuations in focal position during zooming and for focusing (for details see at least abstract lines 1-4), which lens groups are arrayed in order from an object side (for details see at least figure 1), and said first lens group comprises at least a concave lens, a convex lens, and a triple-cemented lens in which a lens is sandwiched in the middle, which lenses are arrayed in order from the object (for details see at least abstract lines 4-7 and group 1, lenses 3-5).

But, Ono et al fails to explicitly teach special low dispersion glass for the sandwiched lens.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Ono et al to include the limitation special low dispersion glass, since it is within the ordinary skill of a worker in the art to select a known formulation of a disclosed material on the basis of its suitability for the intended use.

But, Ono et al fails to explicitly teach said image control means, referring to a transformation coordinate coefficient provided in advance according to a variable power rate by said zoom lens, moves points on the image which are defined by the image signal formed by said imaging means to form a new image signal subjected to coordinate transformation and to output said new image signal.

However the examiner takes official notice to the fact that these features are inherent to video camera systems of which the prior art is disclosed to be designed. It would therefore be obvious to one having ordinary skill in the art at the time the invention was made to include the

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transformation coordinate coefficient provided in advance according to a variable power rate by said zoom lens, moves points on the image which are defined by the image signal formed by said imaging means to form a new image signal subjected to coordinate transformation and to output said new image signal for the predictable result of a efficiently operable camera system.

*Allowable Subject Matter*

4. Claims 9-20 are allowed.

5. The following is a statement of reasons for the indication of allowable subject matter:

The prior art taken singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claims, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper.

In regard to (in)dependent claim 9, the prior art taken either singly or in combination fails to anticipate or fairly suggest a five group +,-,+, -,+ configured zoom lens including a first lens group of the specifically defined configuration stating the first lens group comprises at least a concave lens, a convex lens, and a triple-cemented lens in which a lens made of special low-dispersion glass is sandwiched in the middle, which lenses are arrayed in order from the object; recited together in combination with the totality of particular features/limitations recited therein.

For further reasons for allowable subject matter please see applicant's remarks dated 10/3/2008.

6. Claims 2-8 and 22-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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7. The following is a statement of reasons for the indication of allowable subject matter:

The prior art taken singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claims, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper.

For reasons for allowable subject matter for claims 6-8 and 26-28 please see examiner's office action of 5/28/2008 and applicant's remarks of 10/3/2008.

In regard to dependent claims 2-4 and 22-24, the prior art taken either singly or in combination fails to anticipate or fairly suggest a zoom lens of the disclosed configuration and physical limitations additionally configuring to the numerical/conditional limitations as disclosed in the claim; recited together in combination with the totality of particular features/limitations recited therein.

In regard to dependent claims 5 and 25, the prior art taken either singly or in combination fails to anticipate or fairly suggest a zoom lens of the disclosed configuration including the specific details of a six lens first lens group combining the explicitly defined lenses in the explicitly defined configuration; recited together in combination with the totality of particular features/limitations recited therein.

### ***Response to Arguments***

8. Applicant's arguments with respect to claim 1 and 21 have been considered but are moot in view of the new ground(s) of rejection.

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***Cited Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Hamanishi et al (USPAT 5,978,150) is cited to show a five group zoom lens system in the art.
- b. Oomura et al (USPAT 6,940,656) is cited to show a four group zoom lens system in the art.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES R. GREECE whose telephone number is (571)272-3711. The examiner can normally be reached on M-Th 7:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. R. G./  
James R Greece  
Examiner, Art Unit 2873  
1/7/2008

/Ricky L. Mack/  
Supervisory Patent Examiner, Art Unit 2873